

UPDATE

The Update statement is used to update existing data in a table. It can be used to update one or more columns. Data can be updated by providing new values for columns or by using subqueries to provide the new data.

Simplified Syntax:

```
UPDATE    table_name
SET       column = expression [ , column = expression . . . ]
[FROM     table_name1 [, table_name2 ...] ]
[WHERE    expression];
```

- table_name** - identifies the table to be updated
- SET - identifies the column(s) to be updated and the expression which provides the new value for the column. The expression can be a subquery.
- FROM clause - optional
- identifies additional table(s) referenced in the where clause that lets you update rows in a table based on data in one or more other tables. If more than one table is included, tables are comma-delimited
- WHERE clause - optional. Identifies what records are to be updated.
- if the FROM clause is utilized, table join condition(s) are coded here

```
Update    Course
Set       MaxStudents = 3
Where     CourseID = 'DMIT1001';
```

Updates the Course table and sets the MaxStudents to 3 for CourseID DMIT1001.

```
Update    Course
Set       CourseCost = CourseCost * 1.10
Where     CourseID = 'COMP1017';
```

Updates the Course table and increases the cost of COMP1017 by 10%.

```
Update    Course
Set       CourseCost = (Select  CourseCost
                        From      Course
                        Where     CourseID = 'DMIT2590')
Where     CourseID = 'DMIT2515';
```

Updates the Course table and sets the cost of DMIT2515 to be the same cost as DMIT2590.

More than one column can be updated in a single update statement.

```
Update    Course
Set       CourseHours = 4,
          MaxStudents = 5,
          CourseCost= 300
Where     CourseID = 'DMIT1001';
```

Updates CourseHours, MaxStudents and CourseCost columns for CourseID DMIT1001.